

BEFORE THE  
**Federal Communications Commission**  
WASHINGTON, DC 20554

In the Matter of )  
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Amendment of Part 74 of the Commission’s ) MB Docket No. 18-119  
Rules Regarding FM Translator Interference )  
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To: The Commission

**COMMENTS OF THE  
CRAWFORD BROADCASTING COMPANY**

Crawford Broadcasting Company (“Crawford”) and its affiliates are licensees of 15 AM and nine FM commercial broadcast stations as well as nine FM translators, and is the applicant in two pending translator applications<sup>1</sup>.

As licensee of both full-power FM stations and FM translators, Crawford has interests on both sides of the FM translator interference issue. In recent months, a Crawford affiliate has voluntarily taken one translator silent to mitigate interference to a full-power FM spectrum neighbor. On the other side of the issue, in recent years, we have successfully prosecuted interference cases against several translators in different markets. As such, we believe we have a unique perspective on the issue and perhaps a more balanced view than others who have interests on only one side or the other.

We applaud the Commission’s efforts to bring reform to the FM translator interference avoidance and resolution processes in today’s increasingly crowded FM spectrum, and we offer the following comments in response to the notice of proposed rulemaking.

**1. Predicted/Actual Interference**

Section 74.1204(a) provides for protection of protection of full-power FM station contours by FM translators. Section 74.1204(f) further provides a mechanism by which pre-grant objections can be filed providing “convincing evidence” that the predicted 60 dBμ contour of the translator would overlap a “populated area already receiving a regularly used, off-the-air

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<sup>1</sup> Crawford AM affiliates include KBRT, Costa Mesa, CA; KNSN, San Diego, CA; KCBC, Manteca, CA; KKPZ, Portland, OR; KLZ/KLDC, Denver, CO; KLTT, Commerce City, CO; KLVZ, Brighton, CO; WDCX-FM/WDCZ, Buffalo, NY; WDCX, Rochester, NY; WDJC-FM/WYDE/WXJC/WXJC-FM, Birmingham, AL; WXJC-FM, Cordova, AL; WMUZ-FM, Detroit, MI; WMUZ, Taylor, MI; WEXL, Royal Oak, MI; WRDT, Monroe, MI, WPWX, Hammond, IN; WYCA, Crete, IL; WSRB, Lansing, IL; and WYRB, Genoa, IL. Crawford translator stations include K264CI, Corona, CA; K277DG, San Diego, CA; K234CV, Modesto, CA; K248DD, Portland, OR; K237GG and K264BO, Denver, CO; K236CQ, Commerce City, CO; K232FK, Brighton, CO; W244DL and W296DY, Detroit, MI; and W245CS and W237EK, Birmingham, AL. Crawford affiliate Kimtron, Inc. has pending translator applications in Buffalo and Rochester, NY.

signal of any authorized co-channel, first, second or third adjacent channel broadcast station” and “grant of the authorization will result in interference to the reception of such signal.”<sup>2</sup>

This section prohibits interference to another station’s signal within the translator’s predicted 60 dB $\mu$  contour, but in most cases this interference will be outside the full-power station’s protected contour.

Section 74.1203(a) prohibits “actual interference to... [t]he direct reception by the public of the off-the-air signals of any authorized broadcast station” at any time after the translator commences operation, and further states that “[i]nterference will be considered to occur whenever reception of a regularly used signal is impaired by the signals radiated by the FM translator or booster station, regardless of the quality of such reception, the strength of the signal so used, or the channel on which the protected signal is transmitted.”<sup>3</sup>

In many cases, a proposed translator will “pass the test” provided by §74.1204(f) because there is no predicted interference to existing full-power station listeners within the translator 60 dB $\mu$  contour, but after operation commences, existing listeners located outside the translator 60 dB $\mu$  contour begin receiving interference. At that point, unless the translator licensee is cooperative, the full-power station must bear the burden of prosecuting and proving the interference case to the FCC to compel translator licensee cooperation to change frequency, change location, alter power and/or directional pattern, or go silent to eliminate the interference. This process can take months if not years, and in many cases, the damage is done in fairly short order after the translator signs on – those existing listeners displaced by the translator interference often tune elsewhere and may not ever return. In today’s competitive PPM world, this can be devastating to a radio station’s business.

Heading off a drawn-out and often expensive interference complaint prosecution is to the advantage of all involved parties, including the full-power station licensee, FCC personnel and even the translator licensee. Costs to prosecute translator interference claims can easily run into the tens of thousands of dollars, including legal and engineering fees. The injured party has no mechanism for recouping these costs other than through civil litigation. Scarce Media Bureau resources must also be diverted to deal with such interference claims. It is better for all parties if the entire process can be avoided altogether.

We believe that the provisions of §74.1203(a) and §74.1204(f) should be harmonized so that predicted interference to existing listeners outside the translator 60 dB $\mu$  contour can be addressed prior to grant of the translator application. What constitutes “interference” is well defined in the FCC’s rules by means of codified protection ratios,<sup>4</sup> and we believe these ratios should be applied to predicted interference cases prior to grant of a legitimately-objected translator application.

## 2. Channel Changes

We agree with and fully support the proposed modification of Section 74.1233(a)(1) of the Rules to define an FM translator’s change to any available channel as a minor change as a means of mitigating legitimate interference to an existing full-power broadcast station. This

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<sup>2</sup> 47 C.F.R. §74.1204(f)

<sup>3</sup> 47 C.F.R. § 74.1203(a)(3)

<sup>4</sup> 47 C.F.R. § 74.1204(a) provides for a co-channel undesired-to-desired (U/D) ratio of -20 dB, a first-adjacent U/D ratio of -6 dB and a second/third-adjacent U/D ratio of +40 dB.

will, in many cases, permit fast and complete resolution of interference issues. It is not by any means a panacea, as in densely-populated areas there may well be no frequencies available to which a translator can be moved, but for those situations in which there is open spectrum available, this will provide the translator licensee with an immediate interference resolution mechanism that currently does not exist outside of a major change window.

### **3. Minimum Number of Listener Complaints**

We agree with and support six (6) as the minimum number of listener complaints to be submitted in support of a claim of translator interference. We believe this is a reasonable number, and a full-power station bringing this many complaints undoubtedly has a real interference issue, which may not be the case with a lower number.

### **4. Complaint Requirements and Remediation Procedures**

We support the proposal to codify Section 74.1203(a)(3) and 74.1204(f) listener complaint requirements to include the information listed in the Notice<sup>5</sup>. This information would provide sufficient data for the translator licensee to follow up, if necessary, with the complaining listener, determine the listener's exact location, and make measurements and tests at that location. It would further establish that the complaining listener is not in any way affiliated with the full-power radio station.

We also support removing the complaining listener from the complaint resolution process by requiring the translator licensee, once interference has been initially established through listener complaints, to submit a technical showing that all interference has been eliminated. In many cases, complaining listeners are hostile toward translator licensees and their representatives and may be uncooperative. In other cases, it is difficult to make contact with the complaining listener and arrange for site visits and tests. Finally, this would end the occasional practice of a translator operator providing compensation in some form to the complaining listener in exchange for the listener withdrawing the complaint. Eliminating the complaining listener from the interference resolution process will in many cases speed resolution of the issue.

As noted in comments above, we believe that the application of the appropriate U/D ratio is a good and fair method of determining what constitutes "interference," and that method should also be used in the case of actual interference resolution. As such, any showing by the translator licensee should include a U/D study based upon the F(50, 50) and F(50, 10) field strength charts contained in Section 73.333, unless the use of the Longley-Rice propagation model<sup>6</sup> is indicated based upon established criteria<sup>7</sup>.

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<sup>5</sup> Notice at 19.

<sup>6</sup> See Rice, P.L., Longley, A.G., Norton, K.A., Barsis, A.P., Transmission Loss Predictions for Tropospheric Communications Circuits, NBS Technical Note 101 (Revised), Volumes I and II, U.S. Department of Commerce, 1967.

<sup>7</sup> See footnotes 17 and 20, "Skytower Communications - 94.3, LLC (Memorandum Opinion and Order and Notice of Apparent Liability for Forfeiture)," September 17, 2010, 51 CR 490, 25 FCC Rcd 13204, DA 10-1760. A supplemental showing requires a delta-h of less than 20 meters or greater than 200 meters, or that the FM contour as predicted by the supplemental method is at least 10 percent greater than the same contour as predicted by the standard method.

## 5. Limits on Actual Interference Complaints

We do believe that there should be a full-power station field strength value beyond which no complaint of actual or predicted interference will be considered actionable. We use the term “field strength” herein because in some cases, such as in some instances where the Longley-Rice model is employed where there may be a region of lower predicted field strengths closer to the station with higher predicted fields farther out, “contour” may not be appropriate. We do not, however, believe that 54 dB $\mu$  is the appropriate value for this cutoff field strength.

It has been our long experience that our FM stations routinely have regular listeners well beyond the 54 dB $\mu$  contour and at locations where the predicted field strength is well below that value. In a recent targeted listener survey in one of our markets, we found that 92% of the respondents regularly listen in areas beyond the 54 dB $\mu$  contour and with predicted field strengths well below that value. This is not at all surprising to us.

For class B stations, the 54 dB $\mu$  is the protected contour; for class B1 stations, the 57 dB $\mu$  is the protected contour. In both cases, it is likely that there are listeners to even lower field strength signals than to those with a 60 dB $\mu$  protected contour. Based on our long experience operating FM stations (dating back to the early 1960s), we know this is many times the case.

As such, we believe that a lower value field strength would be more appropriate than 54 dB $\mu$  as a cutoff for interference complaints. There is some argument for a value of 47 dB $\mu$ , based upon a 1975 study and report<sup>8</sup>. However, we feel that a better compromise would be 48 dB $\mu$ , which represents an electric field strength value of 250  $\mu$ V/m. We believe this value to be appropriate for all classes of FM stations and do not recommend that a different value be adopted for class B or B1 stations.

Respectfully submitted,  
CRAWFORD BROADCASTING COMPANY



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<sup>8</sup> See “Report of the National Quadrasonic Radio Committee to the Federal Communications Commission,” November 1975, at page 336, where 10.3  $\mu$ V was found to be the stereo usable sensitivity value for the least sensitive receiver.